## AMENDMENTS TO THE ABSTRACT

Kindly replace the original Abstract with the enclosed Abstract.

## ABSTRACT OF THE DISCLOSURE (mark-up)

An optical packet exchanger is provided which, in a situation where a transmission path for an optical packet is to be switched by using an address signal, prevents the a transmittable capacity for theof an information signal from being decreased decreasing, and which facilitates the extraction of extracting the an address signal even if the a modulation speed for the information signal becomes high. An optical modulation section (102) outputs an optical packet obtained by subjecting output light from a light source (101) to an intensity modulation using an information signal and a phase modulation using an address signal corresponding to a transmission destination for the information signal. An optical splitter section (301) splits the optical packet received via the optical transmission section 200 into two optical packets. An address reading section (302) reads the address signal from the phase of one of the optical packets output from the optical splitter section (301). Based on the address signal output from the address reading section (302), a path switching section (303) determines an output port for the other optical packet output from the optical splitter section (301).

<u>Version with Markings to</u> <u>Show Changes Made</u>

## ABSTRACT OF THE DISCLOSURE (clean copy)

An optical packet exchanger is provided which prevents a transmittable capacity of an information signal from decreasing, and which facilitates the extracting an address signal even if a modulation speed for the information signal becomes high. An optical modulation section (102) outputs an optical packet obtained by subjecting output light from a light source (101) to an intensity modulation using an information signal and a phase modulation using an address signal corresponding to a transmission destination for the information signal. An optical splitter section (301) splits the optical packet into two optical packets. An address reading section (302) reads the address signal from the phase of one of the optical packets output from the optical splitter section (301). Based on the address signal output from the address reading section (302), a path switching section (303) determines an output port for the other optical packet output from the optical splitter section (301).